Fire Department
215 Sixth Street
Royal Oak, MI 48067

Discussion of North Lafayette Paving Options
Pavement Widths and Special Assessments

June 21, 2016

The Honorable Mayor Ellison and
Members of the City Commission:

After reviewing the three proposed options that had been previously presented to the city commission on March 21 (Attachment 1), the fire department concurs with the recommendation from the engineering division to choose option “A”. The standard 27-foot wide proposal for North Lafayette Avenue from West Derby Avenue to the north lot line of lot 189 will not negatively impact fire department emergency operations.

Respectfully submitted,
James Cook
Assistant Fire Chief

Approved,

Donald E. Johnson
City Manager

1 Attachment

Royal Oak
COMMUNITY
DEVELOPMENT

Engineering Division
211 South Williams Street
Royal Oak, MI 48067

Discussion of North Lafayette Paving Options
Pavement Widths and
Special Assessment

March 14, 2016

The Honorable Mayor Ellison and
Members of the City Commission:

The public hearing of assessment for the special assessment paving of N. Lafayette Avenue from W. Derby Avenue to the north lot line of lot 189 was held on February 8, 2016. Based on comments from the public, the city commission directed engineering to prepare several options for paving of N. Lafayette Avenue with different pavement widths as outlined in the meeting minutes from February 8, 2016 to address concerns of regarding tree removals based on road width.

In addition to the city's standard special assessment street paving width policy, staff has prepared two other options based on standard road construction widths for consideration by the city commission as illustrated in attachment 1. Note that these widths are usually employed on roads paving where right-of-way is less than 30 feet. Depending on the option, one to four trees will need to be removed for construction of the roadway. All the trees slated for removal have been identified as sugar or silver maple trees. These tree types are undesirable due to their shallow root systems and generally weaker structure. Maple trees of this size (>24-inch diameter) are often found to be hollow and structurally unsound. It is also likely that the root systems of these trees will be negatively affected due to the construction even under option C. The city would plant two new trees in the right-of-way for every tree removed as part of the project.

Options B and C have 50-foot wide paved areas at the end of the street in order to allow for service and emergency vehicles to turn around. Turn-around areas are recommended for dead-end streets greater than 150 feet in length however the city would not normally install this type of turn around on a 27-foot wide design. It should be noted that Royal Oak's fire code calls for installation of a 90-foot diameter cul-de-sac, and MDOT recommends installation of a 100-foot diameter cul-de-sac at the end of dead-end streets, however large cul-de-sacs are not achievable with the existing 50-foot right-of-way width.

Engineering recommends the standard 27-foot wide layout shown in option A. City special assessment policy dictates that this is the city's standard roadway width, and will allow for parking on both sides of the street.

Option:	Pavement Width	Trees to be removed	On-street parking requirements	Estimated cost per property
A (standard)	27 feet (two 8-foot parking bays w/ one 10-foot min. wide travel lane)	4	Parking on both sides	$4,852
B	25 feet (one 8-foot parking bay w/ one 16-foot wide travel lane)	4	Parking on one side only	$5,271 *$4,587 without turnaround*
C	21 feet (two 10-foot wide min. travel lanes)	1 (or more based on root removals)	No on-street parking	$4,859

If the commission is in agreement with engineering's recommendation to follow our current policies and standards, no action is required. However resolutions for option B and C are provided below.

> **Be it resolved**, the city commission hereby selects Option B (25-foot wide pavement) as presented in Attachment 1 for special assessment paving of N. Lafayette Avenue and directs staff to design the special assessment paving project with this layout.

Or

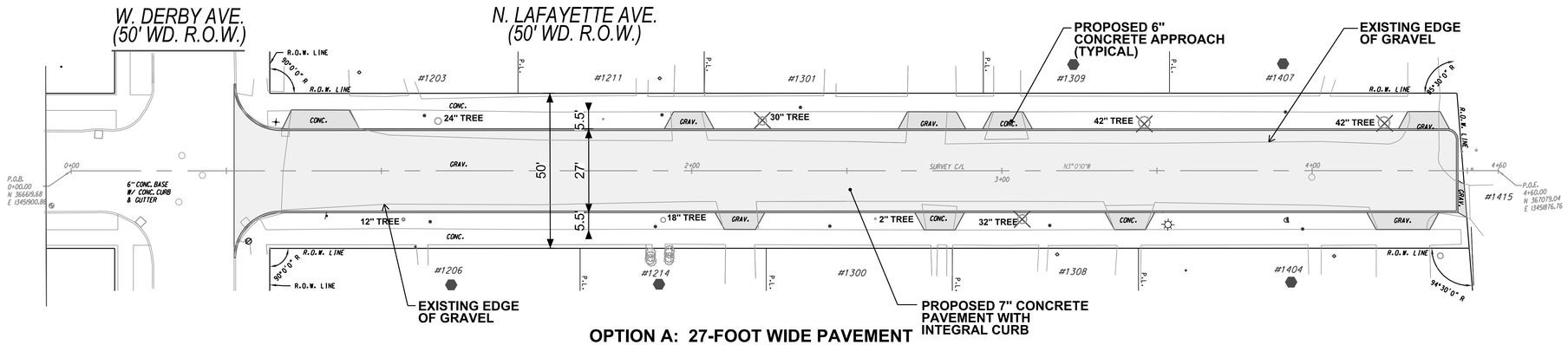
> **Be it resolved**, the city commission hereby selects Option C (21-foot wide pavement) as presented in Attachment 1 for special assessment paving of N. Lafayette Avenue and directs staff to design the special assessment paving project with this layout.

Respectfully submitted,
Matthew J. Callahan, P.E.
City Engineer

Approved,

Donald E. Johnson
City Manager

1 Attachment

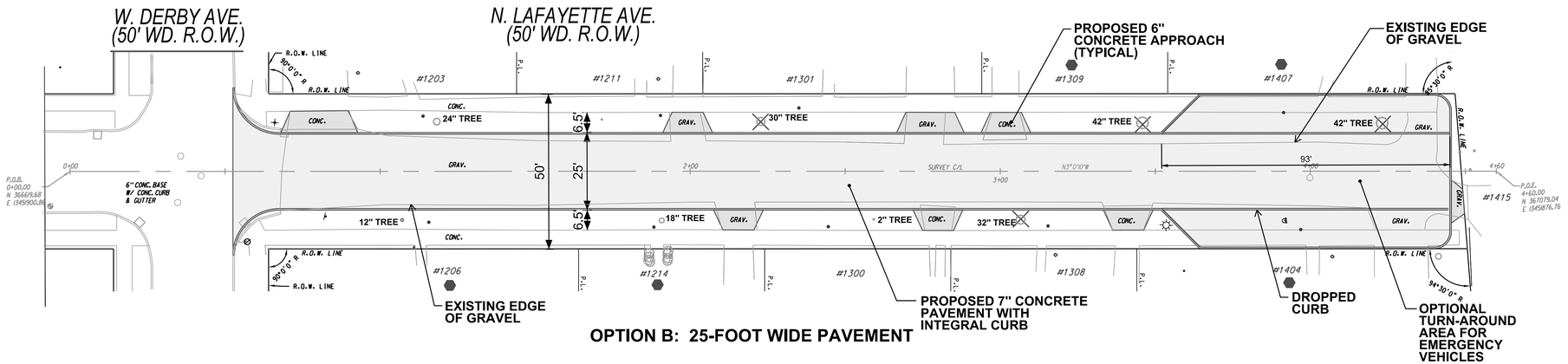


OPTION A: 27-FOOT WIDE PAVEMENT

1" = 40'
0 20 40

NOTES:
- CITY STANDARD WIDTH
- STREET PARKING ALLOWED
- 4 MAPLE TREES REMOVED
- ESTIMATED ASSESSMENT: $4,852 PER PROPERTY

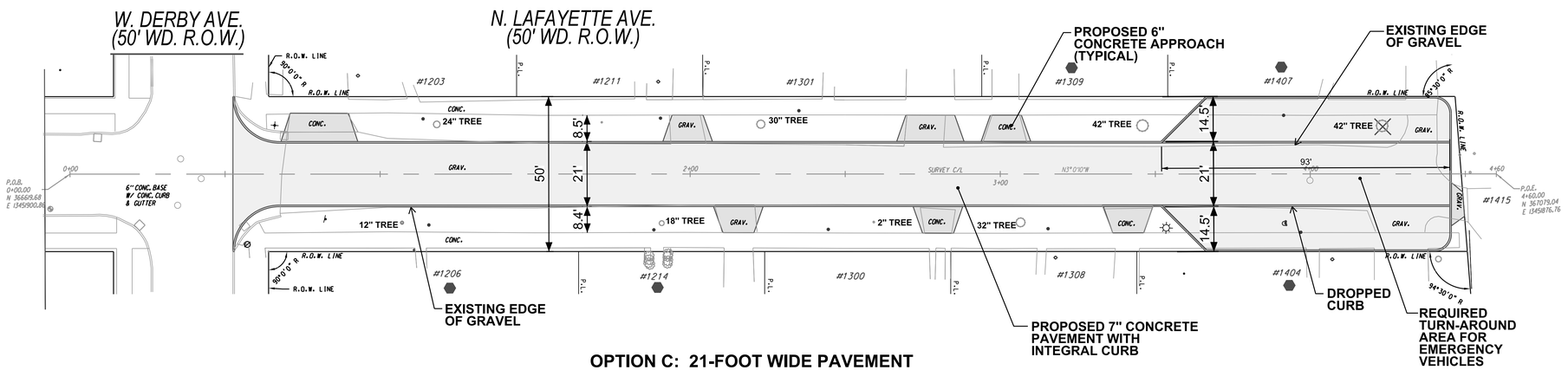
⬢ = SIGNED IN FAVOR OF SPECIAL ASSESSMENT



OPTION B: 25-FOOT WIDE PAVEMENT

NOTES:
- PARKING ALLOWED ON ONE SIDE ONLY
- 4 MAPLE TREES REMOVED
- ESTIMATED ASSESSMENT: $5,271 PER PROPERTY (WITH TURN-AROUND)
- ESTIMATED ASSESSMENT: $4,587 PER PROPERTY (WITHOUT TURN-AROUND)

⬢ = SIGNED IN FAVOR OF SPECIAL ASSESSMENT



OPTION C: 21-FOOT WIDE PAVEMENT

NOTES:
- NO STREET PARKING ALLOWED
- 1 MAPLE TREE REMOVED
- ESTIMATED ASSESSMENT: $4,859 PER PROPERTY

⬢ = SIGNED IN FAVOR OF SPECIAL ASSESSMENT

REVISIONS	DATE

N. LAFAYETTE PAVING OPTIONS

CITY OF ROYAL OAK

DATE: 2016	SCALE: AS SHOWN	
DWN: HJD	DGN. CHKD: HJD	APPR: MJC

PROJECT NO.	PROJECT NAME	SHEET NO.	TOTAL SHEETS
CAP1630	2016 SPECIAL ASSESSMENT PAVING IMPROVEMENTS	1	1